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Ethnic discrimination against second-generation immigrants in hiring: empirical evidence from a correspondence test

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ABSTRACT


This article presents the findings of a field experiment on ethnic discrimination against second-generation immigrants in the Finnish labour market. Five job applicants of Finnish, English, Iraqi, Russian and Somali origin sent equivalent job applications to each of 1000 publicly advertised vacancies. They all had identical qualifications, but differed in one respect, that is, their name. The findings strongly suggest the existence of ethnic hierarchical orderings in the labour market. They reflect that locally gained human capital not only does not equalise employment opportunities for immigrants as such but also rewards them differentially based on their origin, with non-European applicants being the least preferred choices. The findings also reveal that discrimination did not only manifest itself in low callback rates for immigrants but also the order in which employers contacted the different applicants. In a further set of 200 job openings tested in which applicants of immigrant origin had two years more experience than the Finnish candidate, the systematic differences in patterns of callback rates remained the same. Drawing on empirical observations, the article suggests that ethnic hierarchies prevailing in society can also extend to the realm of labour markets resulting in unequal employment chances for otherwise equal job applicants.

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KEYWORDS Ethnic discrimination; correspondence experiment; recruitment; Finland; immigrants

Introduction

The economic incorporation of immigrants has been suggested as one of the most important parameters of their successful integration into their new country. Yet, scholarship on immigrants' labour-market integration

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has frequently pointed to the many barriers they confront in the recruitment process. Several studies have shown that immigrants face disproportionately more unemployment risks and low occupational attainment, despite having local education, work experience and language proficiency (e.g. Birkelund *et al.* 2017; Verkuyten and Zaremba 2005; Rooth and Ekberg 2003). Especially, non-European immigrants and visible minorities tend to suffer the most ethnic penalty. Moreover, discrimination patterns towards immigrants' recruitment seem to remain rather stable over time in various countries (see Zschirnt and Ruedin 2016).

Although all forms of labour-market discrimination are prohibited by law, not all are equally easy to prevent – discrimination at the hiring stage being one of them, as it can be subtle and difficult to observe. Previous studies have utilised a number of methods to reveal discrimination against minority candidates, ranging from qualitative interviews and survey questionnaires to comparing wages and occupational mismatch of immigrants by holding human-capital attributes constant. However, during the past several years, research methodologies using field experiments have increasingly become the principal and most reliable tools of investigating labour-market discrimination; correspondence testing is one of them (see Riach and Rich 2002; Rich 2014). The study reported in this article has employed this technique to detect discrimination in Finland. By responding to 1000 publicly advertised vacancies, it investigates if job applicants of English, Iraqi, Russian and Somali origin with equivalent credentials as that of a Finnish candidate are treated differently in the Finnish labour market. More specifically, the article aims to achieve several objectives. First, it examines systematically whether, and to what extent, employers discriminate against immigrant applicants at the callback stage, by comparing the number of job interviews received by the five groups. Second, it explores if the level of discrimination differs with respect to various occupations tested in this study and if callback rates vary in jobs requiring a vocational diploma than where no diploma is required. Third, previous studies have often focused on the differences in callback rates as indicators of ethnic discrimination. Drawing on empirical observations, this article suggests that discrimination is a multi-faceted phenomenon, and points to the various forms in which discrimination towards the immigrant candidates can also manifest itself. Finally, the article also tests the effect of additional work experience on receiving a callback for immigrants. Based on employer responses to another set of data comprising 200 jobs in

which the immigrant applicants always possessed two years more experience than the Finnish candidate, it investigates whether having significantly more experience than the Finnish applicant also yields more job interview offers for immigrant candidates.

During the past many years, studies using the correspondence method have been conducted in various countries to test ethnic inequality in the labour market by researchers of different disciplines including sociology, labour economics and social psychology (e.g. Zschirnt (2019) in Switzerland, Baert *et al.* (2017) in Belgium, Weichselbaumer (2017) in Austria, Midtbøen (2015) in Norway, Andriessen *et al.* (2012) in the Netherlands, Kaas and Manger (2011) in Germany, and McGinnity and Lunn (2011) in Ireland). In Finland, previously only two studies have employed field experiment techniques to report discrimination in recruitment. The first study by Ahmad (2005) used the participant-observation method to examine discriminatory practices, but it was not a situation testing study in the strict sense of the term, since a control group was used only in a partial set of cases. The second study was conducted by Larja *et al.* (2012), who used the situation testing method to investigate labour-market discrimination.

The context of Finland is noteworthy in that not only is it a Nordic welfare state that aspires to ensuring equal opportunities for all sections of society with abundant anti-discrimination laws, but also that the bulk of immigration in the country has predominantly taken place during the past two decades. The statistics are a witness to this new reality. While the proportion of immigrant population was 0.8% in 1990, it represented around 7% of the total population in 2017. This notwithstanding, the number of immigrants is still rather small compared to other Nordic countries. Up until the 1990s, the Finnish labour market, like the country itself, was predominantly ethno-culturally homogenous. Thus, the task of incorporating workers from sometimes culturally very different contexts into a mostly white and mono-ethnic labour market has not proved to be an easy one. Therefore, despite the introduction of several measures and initiatives, the labour-market integration of immigrants still remains unsatisfactory along several dimensions. In 2014, while the unemployment rate of men and women with foreign background was 14.4% and 17%, the figures for native Finnish men and women stood at 8.4% and 6.3% respectively (Statistics Finland 2018). However, differences within the immigrant population are also apparent: the unemployment rates of immigrants from Asia or Africa are higher than those of European origin. Particularly, immigrants of

African and Middle Eastern background have been reported to face significant discrimination in connecting with the world of work.

Why does discrimination exist? Some conceptual explanations

Discrimination is a prejudiced act of treating some person or a group unjustly on grounds of race, ethnicity, national origin, age, sex or other criteria. Although this act can be subtle or overt in nature and can stem from conscious or unconscious biases, in any case it places a targeted individual or group in an inferior or unfavourable position. In the context of labour market, discrimination can manifest itself in several forms. It can include situations from excluding certain job candidates at the hiring level to differential wages, adverse workplace treatment, lower job performance evaluations, fewer training and career advancement opportunities as well as less job security and disproportional termination of contracts. While it may be easy to define what discrimination constitutes, it is a more difficult task to determine precisely why it exists. This is because causes and motivations underlying differential treatment may range from a simple dislike towards a certain group to more complex processes such as institutional and historical practices, which in some cases can also be intertwined. As a result, to make sense of this intricate phenomenon, explanations as to why there is discrimination tend to vary with respect to different theoretical paradigms.

In economics, the main neoclassical models for studying discrimination are based on either subjective prejudice or as signs of deficient personal qualifications, often distinguished as models of pure and statistical discrimination. Being comparatively more simple than other theoretical explanations, these models tend to analyse the phenomenon of discrimination with the same tools used to investigate all other forms of labour-market behaviour (Shulman 1996). The basic presumption behind the neoclassical models entails that with the passage of time competition in the market will automatically diminish discrimination (such as in Becker 1957). In the pure discrimination model, recruiters, co-employees or clients belonging to the majority group have a 'taste' for discrimination, and they will pay a premium to avoid members of certain socio-demographic groups (see, e.g. Kirschenman and Neckerman 1991; Cain 1986). According to this approach, the minority jobseekers can still encounter discrimination despite having all the qualifications and skills required for a job. In contrast, in the statistical discrimination

model, rather than subjective bigotry or prejudice, employers' imperfect information about jobseekers' true credentials constitutes the main reason behind their rejection of minority candidates. It is suggested that the employers evaluate the applicants not only in terms of their professional qualifications, previous experience and job history, but may also resort to skin colour, race or socio-demographic membership of the applicants in making their hiring decisions (see Kirschenman and Neckerman 1991; Arrow 1973; Phelps 1972). In other words, in the neoclassical model of statistical discrimination, individuals receive treatment based on perceived characteristics of their group (Shulman 1996).

Both these taste-based and information-based models have faced several criticisms. For example, it is claimed that the sources of 'tastes' for discrimination as well as 'expectations' for ability are left exogenous and unspecified in these models (Dilks *et al.* 2010). Moreover, it is suggested that such unspecified sources in these models may also stem from socio-psychological factors that socially construct the underlying mechanisms behind discriminatory practices (e.g. Reskin 2002). In response to these limitations, both models have seen a gradual refinement over the past years. For example, Coate and Loury (1993) extend the information-based model to situations where ethnic minorities lower their investment in human capital in response to the disincentives created by discrimination. Gneezy *et al.* (2012) in their study employ field experiments across several market and agent types to examine the source of discrimination. They find that when the object of discrimination is perceived by the discriminator to be controllable, discrimination is taste-based, and when the object of discrimination is exogenous, it is statistical in nature. Several other studies have also developed and extended the initial models of statistical and pure discrimination, including Goldin (2014), Akerlof and Kranton (2010), Croson and Gneezy (2009), Lang *et al.* (2005), Moro and Norman (2004), Rosén (2003), Mailath *et al.* (2000), and Lundberg (1991).

Another competing explanation of discrimination in economics is the political economy framework, which is a critique of neoclassical models. This perspective places stronger emphasis on the question of how political factors shape economic outcomes. It focuses less on individual motives and more on institutional structures that produce socioeconomic inequality. According to this theoretical framework, institutional discrimination occurs when members of certain social groups such as immigrants and minorities are systematically prevented from gaining equitable access to resources because of the implicit or explicit rules, practices,

structures or operating policies of a social institution, organisation or government (see, e.g. Sampson 2008). In other words, it is the normal operations of a society that result in disparate outcomes and a negation of equal rights and opportunities for some groups. The sociological explanations for discrimination generally take their inspiration from conflict theory (Tilly 1998; Tomaskovic-Devey 1993). In this conceptual framework, discrimination occurs because the dominant group wants to protect its privileged access to scarce resources by excluding members of the minority groups. The dominant group through strategic and self-interested actions strives to maintain a system of inequality to preserve its privileges (Reskin 2000). The social psychological explanations for discrimination often stem from social cognitive theory, according to which people have a tendency to automatically categorise others into in-groups and out-groups (Fiske *et al.* 1999). These categorisations, however, work both ways: on the one hand, automatic categorisation is a useful measure to deal with vast amount of incoming information in a complex world (Fiske 1998). On the other hand, it can also create stereotyping and biases in our understanding of other people and groups, potentially leading to 'us-versus-them' attitudes.

Apart from these theoretical explanations, the literature on ethnic hierarchies and social distance suggests that although ethnic out-groups may encounter discrimination in general, some groups may experience less or greater social acceptance/rejection from the mainstream society than others. Research conducted in this domain has demonstrated that in-groups seem to have specific preferences for contact with members of out-groups, who are ranked as more or less desirable social partners (see Hagendoorn 1995). It is claimed that there often prevails a social consensus about the rank assigned to some group, which is shared by most members of the in-group, whether they hold ethnocentric or racist views or not (e.g. Verkuyten and Kinket 2000). In other words, the pattern of out-group preferences is irrespective of the acceptance or rejection of some out-group. As Hagendoorn and Hraba (1987) point out in the context of the Netherlands, ethnic hierarchy essentially mirrors a social representation of the status hierarchy of out-groups. Multiple studies conducted in various countries provide support to the existence of ethnic hierarchies in society, including, among others, Snellman and Ekehammar (2005) in Sweden, Verkuyten and Kinket (2000) and Hagendoorn and Hraba (1989) in the Netherlands, and Bobo and Zubrinsky (1996) in the USA. However, there are only a few studies that investigate the existence of ethnic hierarchies in

the labour market such as Weichselbaumer (2017), Andriessen *et al.* (2012) and Baert *et al.* (2017). A recent study that explicitly tests the thesis of ethnic hierarchies in the Swedish labour market is a correspondence experiment by Vernby and Dancygier (2019). It clearly demonstrates that ethnic hierarchies severely restrict immigrants' scope of employment opportunities and reveals that although all immigrant groups encounter discrimination, the chances of receiving a callback significantly decline with the degree of socio-cultural and ethnic distance with the mainstream group.

In Finland, several surveys have been conducted since the 1990s to investigate the attitudes of the mainstream population towards various immigrant groups (e.g. Jaakkola 1999, 2005, 2009). In these surveys, immigrants from European countries, such as from Britain and Norway, were consistently located at the top and those from Iraq, Somalia and other non-Western countries at the low end of the ethnic preference ladder. These hierarchies were also reflected in Finns' views about their preferred neighbours and desirable marriage partners. Notwithstanding the fact that ethnic hierarchical orderings remained intact, the results of these surveys also showed that attitudes towards immigrants had grown less negative over the years.¹ Although no recent information is available on ethnic hierarchies since the last comprehensive survey conducted in 2007, however, it is possible to suggest from the discussions carried out in the media that these hierarchies have not changed substantially. The aim of this article is not to specifically test the thesis of social distance and ethnic hierarchies as such, but it allows us the opportunity to observe to what extent ethnic hierarchies prevailing in society revealed in previous surveys are also translated into the realm of labour markets resulting in unequal employment chances for otherwise equal job applicants.

Data and experimental design

Using the correspondence method, this experimental study was carried out between June 2016 and March 2017 to test job discrimination in the Finnish labour market. Five fictitious job applicants of Finnish, English, Iraqi, Russian and Somali background sent identical job applications to each of 1000 job vacancies that were advertised on the

¹These results, nevertheless, contrast with the findings of a study by Jasinskaja-Lahti *et al.* (2002) in which immigrants did not report a decline in experiences of labour-market discrimination.

website of the Finnish employment service. This means that altogether 5000 applications were sent to various firms located in major cities of Finland, including Helsinki, Espoo, Tampere, Vantaa, Turku, Oulu, Lahti, Kuopio, Jyväskylä and Pori. Half of the jobs were applied for with male and half with female names in each of the five selected groups, but the men and women did not apply for the same job. The ethnic affiliation of the job applicants was signalled to the employers through carefully selected ethnically distinguishable and commonly used names by members of a certain group. Both first names and last names were used. The names were first chosen from various websites that listed the most common/popular English, Iraqi, Russian and Somali names during the period 2016–2017. They were then shown to immigrants belonging to the respective groups. After consulting with them, a final list of names was prepared that they thought was most representative of their groups. In addition to the names, the ethnic background of the applicant was also conveyed by explicitly stating the mother tongue of the candidate in the CV, such as Arabic, English, Russian and Somali. This helped to ensure that no ambiguity was left in the mind of the employer as to which ethnic group the job applicant belonged.

All the ethnic applicants were mentioned to have received their entire schooling, vocational diplomas and work experience in Finland to fend off any discrimination based on the grounds that qualifications and experience were gained abroad. The age of the fictitious applicants varied between 24 and 28 years. When they applied for the same job opening, the age difference among them varied between five months and one-and-a-half years, since assigning exactly the same age to all the applicants would have aroused suspicion. The job application consisted of a letter of application and a CV. Five letters sent out for any job were similar in terms of content. It was ensured that the letters were well-designed. It was quite apparent from these letters that the applicant was a highly motivated, flexible and ambitious person. The letters also contained other details including why the applicants thought they would be an excellent candidate for the advertised position and also a short description of their personal traits such as the ability to work in harmony with co-workers, work ethic and communication skills. The style and grammar of the letters clearly indicated that the immigrant candidate had excellent Finnish-language skills.

A CV generator software was used to create the CVs. For any job, the CV generator created five different but equivalent CVs across all characteristics for the five applicants responding to the same vacancy. The CVs

included such details as applicants' education, proficiency in Finnish and English language, prior work experience, computer and software skills, names of institutions at which they had attained their education and vocational diplomas, gender, age, postal and email addresses, phone number, mother tongue as well as hobbies. All the CVs were identical with respect to education, previous experience and vocational diplomas. All the immigrant candidates had excellent proficiency in written and spoken Finnish. All the candidates had an equal number of years of work experience for any job they applied for. Also, the addresses chosen were located in areas with comparable socio-economic characteristics. Thus, essentially, the only respect in which the five candidates differed was in their name. However, in order to avoid risk of exposure, it was important to keep slight differences in the CVs. For example, the font type, font size and layout of the CVs and the order in which the various sections appeared differed. The hobbies assigned to the applicants were also different, but they were rather typical and did not stand out.²

The specific occupations covered in this experiment included waiters, cooks, cleaners, sales representatives, office clerks, office receptionists, cashiers and miscellaneous restaurant staff. They varied from unskilled and medium-skilled to skilled occupations and required from none to many years of experience. While both male and female applicants answered the job advertisements in the restaurant and catering, retail trade and cleaning sectors, only female candidates responded to vacancies in the clerical and customer service sectors. This was done to prevent any gender bias in short-listing. An attempt was made to respond to the job openings on the same day on which they were advertised. It was assumed that such a practice would demonstrate a strong interest in the vacancy on the part of the applicant and would also reduce the chances that a job opening had already been filled.

All the job applications were sent via email, which is the most common way to respond to a job vacancy in Finland. The employers could contact the applicants by email or telephone. The employer calls were not received directly. Instead, a separate voicemail box was set up for each of the applicants, where the employer was requested to leave his/her

²In order to check whether slight variations in age, the style of the job application letter, the style of CV and the job application sending order had any impact on receiving a callback from the employer, cross tabulations were made and the chi square tests of independence were conducted. The results showed that these variations had no statistically significant relationship with the chances of receiving a job interview offer. (The chi-square tests of independence were $\chi^2 = 2.025$, $df = 4$, $p = 0.731$, $\chi^2 = 1.162$, $df = 4$, $p = 0.884$, $\chi^2 = 1.691$, $df = 4$, $p = 0.792$, and $\chi^2 = 1.599$, $df = 4$, $p = 0.809$ for the above variations respectively.)

message. A response was considered as positive when the employer invited the applicant to attend an interview. In contrast, it was classified as negative if the employer formally rejected the applicant or did not respond at all. Standard automated email responses confirming the receipt of job applications were also recorded as negative.

Results

Employer responses by name

Table 1 first sheds light on how employers responded to the five job candidates striving for the same vacancy after sending out 5000 job applications. Chi-square tests were performed to examine whether the differences in the distributions of employer responses were statistically significant. The null hypothesis in each test assumed that the distribution of responses in the three categories is the same for all the groups. The results of the chi-square tests are shown in the table, indicating that the null hypotheses can be rejected. As the table clearly reflects, similar human capital may not necessarily reward job seekers similarly in the labour market. The applicants with a Finnish name received a considerably greater number of callbacks (39%) compared to applicants with an immigrant name. However, as the aggregated statistics show, the level of discrimination seems to vary significantly with respect to different immigrant groups. While candidates with an English and Russian name were viewed less negatively by employers, with callback rates of

Table 1. Employer responses differentiated by name and gender, %.

	Finnish	English	Russian	Iraqi	Somali	Total	
<i>Aggregated sample</i>							
Callback	39.0	26.9	22.8	13.4	9.9	22.4	$\chi^2 = 321.52$ df = 8. $p = 0.000$
'We regret to inform you'	6.8	7.7	8.8	6.3	7.0	7.32	
No response	54.2	65.4	68.4	80.3	83.1	70.28	
Total	100	100	100	100	100	100	
N	1000	1000	1000	1000	1000	5000	
<i>Male applicants</i>							
Callback	33.8	24.6	19.2	9.2	6.8	18.72	$\chi^2 = 185.75$ df = 8. $p = 0.000$
'We regret to inform you'	6.8	7.6	7.0	3.8	4.0	5.84	
No response	59.4	67.8	73.8	87.0	89.2	75.44	
Total	100	100	100	100	100	100	
N	500	500	500	500	500	2500	
<i>Female applicants</i>							
Callback	44.2	29.2	26.4	17.6	13.0	26.08	$\chi^2 = 153.92$ df = 8. $p = 0.000$
'We regret to inform you'	6.8	7.8	10.6	8.8	10.0	8.8	
No response	49.0	63.0	63.0	73.6	77.0	65.12	
Total	100	100	100	100	100	100	
N	500	500	500	500	500	2500	

26.9% and 22.8% respectively, the most aversion was exhibited towards applicants with an Iraqi and Somali name: they were able to receive a job interview offer in merely 13.4% and 9.9% of all the cases. These observations show that despite the presence of a wide scope of laws prohibiting discrimination on various grounds, there still seems to be extensive discrimination occurring against applicants of immigrant background in Finland.

Is there greater aversion towards male immigrant applicants than female immigrant candidates? [Table 1](#) also provides the results by gender. Overall, male applicants received fewer callbacks than female applicants across all the groups. Especially, the callback rate for Iraqi and Somali male applicants was considerably low, standing at merely 9.2% and 6.8% respectively. However, based on these general observations, it cannot be stated that male immigrants face more discrimination than their female counterparts. In fact, on a closer look, female immigrant applicants encountered slightly more discrimination than immigrant men. As we can calculate from [Table 1](#), 15% of the immigrant men and approximately 22% of the immigrant women received a callback. The corresponding figures for Finnish applicants stand at 34% and 44% respectively. Therefore, the difference between male Finnish and male immigrant candidates is 19 percentage points and between female Finnish and female immigrant candidates 22 percentage points. For female applicants, the difference is thus about 4 percentage points greater than for male candidates, which means that discrimination against female immigrants is slightly higher than immigrant men. To test further whether gender differences were statistically significant, logistic regression analyses were also conducted (not shown in [Table 1](#)). However, the interaction term of the model was not found to be statistically significant.

Employer responses by occupations tested

Next, we turn to consider if the level of discrimination varies in different occupations tested in this experiment by comparing the relative callback rates. Being frequently used in correspondence studies, relative callback rate is an effective measure to calculate discrimination, as it makes differential treatment easier to understand in terms of real events. It shows how many additional job applications an equally qualified immigrant applicant will need to send to obtain a similar number of job interview offers as the majority candidate. [Table 2](#) provides a description of relative

Table 2. Callback rates and relative callback rates by occupation.

	Finnish		English		% Callback		Iraqi		Somali	
	CR	RCR	CR	RCR	CR	RCR	CR	RCR	CR	RCR
<i>Aggregated sample (N = 1000)</i>										
Restaurant staff (N = 243)	36.6		22.2	1.65***	20.2	1.82***	13.6	2.70***	8.2	4.45***
Waiters (N = 206)	51.5		39.3	1.31***	29.1	1.77***	20.4	2.52***	13.1	3.93***
Cooks (N = 220)	45.5		30.0	1.48***	27.7	1.61***	12.7	3.50***	12.3	3.63***
Cleaners (N = 127)	38.6		26.8	1.44***	28.3	1.36*	13.4	2.88***	11.0	3.50***
Sales representatives (N = 87)	34.5		24.1	1.43	12.6	2.73***	6.9	5.00***	5.7	6.00***
Office clerks/receptionists (N = 68)	16.2		10.3	1.57	10.3	1.57	10.3	1.57	7.4	2.20
Cashiers (N = 49)	14.3		12.2	1.17	8.2	1.75	2.3	7.00*	2.0	7.00*
<i>Male applicants (N = 500)</i>										
Restaurant staff (N = 122)	27.0		19.7	1.38	14.8	1.83***	10.7	2.54***	8.2	3.30***
Waiters (N = 107)	34.6		31.8	1.09	22.4	1.54**	14.0	2.47***	6.5	5.29***
Cooks (N = 122)	49.2		32.0	1.54***	28.7	1.71***	9.8	5.00***	9.8	5.00***
Cleaners (N = 82)	29.3		20.7	1.41**	17.1	1.71**	7.3	4.00***	4.9	6.00***
Sales representatives (N = 48)	27.1		16.7	1.63	8.3	3.25**	0.0	NA	2.1	13.00***
Office clerks/receptionists (N = 0) [†]										
Cashiers (N = 19)	10.5		5.3	2.00	5.3	2.00	0.0	NA	0.0	NA
<i>Female applicants (N = 500)</i>										
Restaurant staff (N = 121)	46.3		24.8	1.87***	25.6	1.81***	16.5	2.80***	8.3	5.60***
Waiters (N = 99)	69.7		47.5	1.47***	36.4	1.92***	27.3	2.56***	20.2	3.45***
Cooks (N = 98)	39.0		27.6	1.41*	26.5	1.46**	16.3	2.38***	15.3	2.53***
Cleaners (N = 45)	55.6		37.8	1.47*	48.9	1.14	24.4	2.27***	22.2	2.50***
Sales representatives (N = 39)	43.6		33.3	1.31	17.9	2.43**	15.4	2.83**	10.3	4.25***
Office clerks/receptionists (N = 68)	16.2		10.3	1.57	10.3	1.57	10.3	1.57	7.4	2.20
Cashiers (N = 30)	16.7		16.7	1.00	10	1.67	3.3	5.00	3.3	5.00

Note: CR = callback rate; RCR = relative callback rate.

*** $p < 0.001$.

** $p < 0.01$.

* $p < 0.05$.

[†]There are no values for men in the corresponding cells, since only females applied for office clerk/receptionist jobs as mentioned earlier in the data section.

callback rates in various occupations by gender with significance tests. The significance tests are comparing the Finnish applicants with the immigrant groups. The different results in significance tests in the table can in principle be explained as real differences in callback rates or as a result of different sample sizes. The latter explanation is not valid in [Table 2](#), since the sample sizes are the same in both groups. The same is true when comparing each immigrant group with the Finnish applicants: the numbers of applicants are identical. However, when comparing the different occupations, we can see that the numbers of cases vary between occupations. In this context, the significance does not depend on the magnitude of the relative callback rate alone, but also on the number of cases in the group. For example, when we compare Finnish and Somali applicants in aggregated sample, we find a much smaller difference in relative callback rate between them in the waiters' occupations to be statistically more significant than the greater difference between them in the cashiers' occupations.

Reverting to the matter under consideration, as we can see from aggregated statistics, especially in occupations such as sales representatives, miscellaneous restaurant staff and waiters, applicants with immigrant names confronted the most barriers. However, again, there were significant differences between immigrant applicants of European and non-European origin. For example, for sales representatives' positions, an applicant with an English name will need to submit 1.43 times more and a Russian name 2.73 times more job applications in order to receive an identical number of interview offers as the Finnish candidate. In contrast, a candidate with an Iraqi and a Somali name with equal human capital will need to send many more applications, that is, 5.00 and 6.00 times more respectively. Office clerks and receptionists are the only positions where immigrant applicants of both European and non-European background show the least differences. When the statistics are differentiated by gender, we can note that male applicants of Iraqi and Somali background were given short shrift by the employers most especially in occupations of sales representatives, cleaners and waiters. Female applicants of the same groups seem to face comparatively less discrimination, however. For example, in cooks' positions, while equally qualified male Iraqi and Somali applicants will both need to send 5.00 times more applications compared to the Finnish candidate, female Iraqi and Somali candidates will need to submit 2.38 and 2.53 times more applications respectively.

To explore further whether the relative callback rates differ significantly in occupations where a vocational diploma is required vs. where

it is not, additional tests were performed (tests not shown in Table 2). The assumption behind this exercise was that having these credentials would improve immigrants' chances of receiving a callback from the employer. If the effect of the required diploma would vary by ethnic group, it would provide a more detailed picture of discrimination. However, when the effect of required diploma and its interactions with ethnicity were tested, neither the main effect of the required diploma nor the interaction were found to be statistically significant at the 5% level ($p = 0.068$ for the interaction term). In other words, relative callback rates in jobs requiring and not requiring a diploma do not differ significantly, and the significance of a required diploma does not vary between the immigrant groups either.

Discrimination as a multi-faceted phenomenon

Previous experimental research has primarily focused on the differences in callback rates as indicators of ethnic discrimination. The empirical observations from this study suggest that discrimination occurs in other forms as well. Table 3 throws light on one such form, namely, who receives the callback first when applicants strive for the same position. In 288 cases, the employer invited two or more applicants for an interview. In such cases, the order in which they were contacted is also important especially when it is a consistent pattern, as it shows employers' preferences for a certain candidate. In Table 3, the expected values were computed by assuming an even distribution under the null hypothesis of equal probability of receiving the callback first between the groups (since there was an equal number of applicants in each group). The null hypothesis is rejected, suggesting that the differences between the groups cannot be explained by random variation between the samples. Instead,

Table 3. Who gets the callback first when two or more applicants were invited for an interview?

		Applicant name					Total	
		Finnish	English	Russian	Iraqi	Somali		
Male applicants	Observed values	66	24	7	24	6	127	$\chi^2 = 93.197$
	Expected values	25.4	25.4	25.4	25.4	25.4	127	$df = 4,$ $p = 0.000$
Female applicants	Observed values	104	25	10	20	2	161	$\chi^2 = 209.963$
	Expected values	32.2	32.2	32.2	32.2	32.2	161	$df = 4,$ $p = 0.000$
Total		170	49	17	44	8	288	

there must be a systematic factor leading to the trends observed in [Table 3](#). As can be seen, applicants with a Finnish name get the callback first much more frequently than applicants in the other groups. While Russian and Somali applicants only rarely received the callback first, English and Iraqi applicants are sandwiched between the two extremes. The situation of Russian applicants here is interesting in that we would expect them to be located closer to the English applicants, since in other respects they are not much different from English candidates. A plausible explanation for this is that a Russian applicant is often invited along with a Finnish applicant. When it happens, it is the Finnish applicant who gets the invitation first. The difference between male and female applicants was also tested, but no statistical significance was obtained ($X^2 = 7.50$, $df = 4$, $p = 0.112$).

Employer reluctance especially towards applicants with a non-European name was observable in other forms as well. For example, these applicants often had to wait for a longer time to receive a callback than their European counterparts. They were also among the majority of those who received no response from the employer. Employer preferences for the applicants with a European name were evident in another way, too: there were 55 instances in which only the three applicants of European background were invited to an interview, compared to just a single case of where only the two non-European immigrant applicants were contacted. However, even in these 55 cases, immigrant applicants still encountered discrimination when we consider the order in which the employer contacted the candidates: in the majority of these cases, the employer first contacted the Finnish applicant, followed by the English and Russian candidate. There were many cases where the employer contacted the Iraqi or Somali applicant after the other candidates had informed that they had found a job elsewhere. There were also some cases where the employer informed the Finnish applicant that s/he had excellent work experience and would mostly likely get the job if the applicant could come to see the employer next morning. In two cases, the employers representing two well-known enterprises in Helsinki already offered the job to the Finnish applicant even without a formal interview, while the immigrant applicants of Iraqi and Somali origin with identical credentials were told that they could not be short-listed for an interview this time.

Although the above observations clearly suggest employer preferences for the Finnish applicants, a note of caution is worth mentioning when generalising the findings of [Table 3](#). In determining the order of

responses, less than 30% of the employers' responses could be included in the analyses. The way these cases have been selected may give rise to concerns about post-treatment bias. Coppock (2019) has suggested a number of remedies to address this issue, but in the present case, they did not seem to offer a solution. As Gary King (2010) states, there is not always a solution to this type of problem. Accordingly, the generalisability of the results in Table 3 is not fully certain.

Does additional work experience lower discrimination against immigrants?

All the analyses conducted thus far were based on answering 1000 job openings in which all the applicants had identical human-capital attributes, including age, schooling, work experience, language skills and vocational diploma. After collecting this data, another set of 200 jobs were also applied for by the five candidates. In these 200 jobs, all the applicants were equivalent along all dimensions, except in the amount of previous work experience: the immigrant candidates always possessed two years of additional experience than the Finnish candidate. For example, if the Finnish applicant mentioned one year of experience in his/her CV, the immigrant applicants told that they had three years of experience. The aim behind this exercise was to investigate to what extent having a significant advantage in this regard would increase immigrants' probability of receiving a callback from the employer. By comparing the two data sets side by side, it allows us the opportunity to isolate the impact of additional work experience on the chances of getting invited to a job interview. Table 4 presents the results of this exercise.

As is easy to observe, possessing more experience largely does not seem to increase immigrants' chances of getting invited to a job interview. The results of the significance tests are also given below the table. Hypothesis of the chi-square test assumed that there are no differences in the net discrimination rates between Panel A and Panel B of the table. As can be seen, no null hypotheses can be rejected. In other words, having two years of additional experience does not necessarily change the net discrimination rates or relative callback rates for applicants of immigrant background. Studies by Bursell (2007) and Vernby and Dancygier (2019) in Sweden have also reported that additional merits did not impact the callback rate for applicants with foreign-sounding names (see also Baert *et al.* 2017; Bertrand and Mullainathan 2004).

Table 4. A comparison of the callback rates when immigrants had identical experience and additional experience with respect to the Finnish applicant.

	Finnish/ English	Finnish/ Russian	Finnish/ Iraqi	Finnish/ Somali
Panel A: Identical experience (1000 jobs)				
1. No callback	561	572	587	598
2. Both applicants invited	220	190	111	87
3. Applicant1 invited, Applicant2 not	170	200	279	303
4. Applicant2 invited, Applicant1 not	49	38	23	12
5. Net discrimination rate	28%	38%	62%	72%
6. Relative callback rate	1.45	1.71	2.91	3.94
Panel B: Additional experience (200 jobs)				
1. No callback	95	101	98	99
2. Both applicants invited	56	49	25	11
3. Applicant1 invited, Applicant2 not	38	45	69	83
4. Applicant2 invited, Applicant1 not	11	5	8	7
5. Net discrimination rate	26%	40%	60%	75%
6. Relative callback rate	1.40	1.74	2.85	5.22
χ^2	0.084	0.098	0.039	0.052
df	1	1	1	1
p-value	0.771	0.755	0.843	0.820

Notes: In this table, all the applicants have the same amount of experience in Panel A, whereas the immigrant applicants have two more years of experience than the Finnish applicant in Panel B. Net discrimination rate = (Row 3 – Row 4)/(Row 2 + Row 3 + Row 4); Relative callback rate = (Row 2 + Row 3)/(Row 2 + Row 4).

Conclusion

If immigrants' successful integration into the labour market can be regarded as an important parameter of their successful integration into the new society, then the results of this empirical investigation are not too encouraging. The findings show that having a 'wrong' name carries a significant labour-market penalty for immigrant job seekers even when they possess identical human-capital credentials as the mainstream candidate. When considering the fact that in actual life there would be greater differences and variation in immigrants' credentials in terms of host-language skills, education and other qualifications, we can assume that there would in fact be even more discrimination in the labour market than this study has revealed (see Bursell 2007). In the period during which this study was conducted, the employment trend in Finland was favourable, with employment on the increase. Therefore, it can be assumed that employers would have been more open to considering immigrant applicants because of labour demand. Despite that, the extent of discrimination observed in this study is rather high, even when compared with other European countries (e.g. Carlsson and Rooth 2007; Bursell 2007; Midtbøen 2015). Thus, it can be expected

that had this research been undertaken in times of economic recession, the extent of discrimination would likely have been even higher.

However, as the empirical observations clearly indicate, immigrants cannot be bundled together as a single group. Rather, there seems to prevail a strong ethnic hierarchy in the Finnish labour market, which renders some groups more or less disadvantaged than others. The ethnic hierarchical orderings observed in this study appear to mirror ethnic hierarchies reported in previous attitudinal surveys in Finland. In these surveys, immigrants from European countries, such as from Britain, were considered as the most preferred and those from Iraq, Somalia and other non-Western countries as the least preferred groups by the Finns. The findings of this study provide empirical evidence that ethnic hierarchies in society (Hagendoorn and Hraba 1987, 1989) can also significantly extend to the labour market in terms of a distinct set of opportunities for different immigrant groups despite possessing equivalent qualifications and host-language skills. In this regard, although the aim of this article was not to test the thesis of social distance as such, the findings seem to offer support for it. It is easy to notice that Finnish employers prefer ethnic groups that are perceived to be more proximate to the mainstream group in terms of colour, culture and religion.

As the discussion in this article has revealed, employer attitudes varied significantly with respect to applicants with a European and non-European name. Applicants with a Somali name are the least desirable candidates for the employers having the lowest callback rate (9.9%). There are also significant differences in relative callback rates especially in occupations such as sales representatives, miscellaneous restaurant staff and waiters. Applicants of non-European origin, again, seem to confront the most barriers in entering these occupations. The findings also show that relative callback rates in jobs requiring and not requiring a vocational diploma do not differ significantly either. Discrimination is also visible in terms of the order in which employers contacted the applicants ($p = 0.000$), with non-European immigrant applicants often being the last on the employers' preference list. Compared with male candidates of the same group, female immigrant applicants encountered slightly more employer reluctance, but the differences by gender are not different by ethnicity. Even in the additional 200 jobs applied for where immigrant candidates had two years more work experience than the Finnish applicant, the differences in patterns of callback rates for the ethnic applicants did not change. This, again, suggests that there is a strong ethnic hierarchy in the Finnish labour market and an increase in immigrants' work

experience, beyond a certain level, may not necessarily yield greater employment chances. In addition to the above analyses, multiple logistic regression models (which are not reported in this article) were also employed to test whether different variables – such as firm size, required work experience, required Finnish-language skills, employer gender, job-skill level and city of job location – had any impact on receiving a callback. Also, interactions between many of these variables and applicant background were tested. The results indicated that, overall, immigrants' chances of receiving a callback are mostly evenly distributed across jobs with different characteristics. Putting it differently, discrimination seems to be pervasive through all kinds of occupations.

Irrespective of the reasons that may underlie employers' discriminatory practices, the empirical findings of this study propose that immigrants' differential access to the labour market and their distribution across the occupational hierarchy is not per se the result of insufficient education, work experience and language skills. They further highlight that the relevant anti-discrimination laws do not necessarily prevent employers from excluding immigrant job seekers even if they possess identical personal credentials as the mainstream candidate. From a policy perspective, the discriminatory practices can be harmful especially on two levels. First, they can act as a disincentive for further investment in human capital, if immigrants perceive that such an investment does not yield sufficient rewards. Secondly, they can also push them to rely on their ethnic networks, which may potentially lead them to jobs of low socio-economic status in certain sectors of the labour market in which the chances for upward mobility can be rather restricted (Ahmad 2015). The level of discrimination found in this study can be especially a cause of concern when considering the context of this study, namely, Finland – a Nordic welfare society that aspires to principles of universalism and to creating equal opportunities for all members of society, including immigrants.

In the end, it is also appropriate to discuss some study limitations. The first limitation pertains to the fact that the findings of this study provide an accurate estimate of discrimination only on the callback stage, that is, in receiving a job interview offer: it is difficult to determine to what extent the success rate at the callback stage would be translated to the next stage of obtaining the job itself. For example, it is difficult to predict how the employers might react to an individual's ethnicity when they meet the job applicant in person. However, some previous studies have suggested that for the most part discrimination occurs at the first stage of the

recruitment process when applicants are short-listed for interview. Thus, differences in callback rates at the first stage may offer invaluable information on the extent of discrimination that some immigrant group may be encountering in the labour market. Second, as regards the generalisability of the study findings, the results are not representative of the entire Finnish labour market, since the experiment was performed in a limited number of occupations, economic sectors and cities. Third, the correspondence method employed in this study can only shed light on discrimination in job openings advertised publicly, not in positions filled through social networks which may be another source generating discrimination for immigrants in the labour market.

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